

City of Branson Sustainability:

2012 Summary

Creating Our Preferred Future

On Behalf of Branson
Sustainability Council

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Sustainability \$\$avings Make Sense:

○ LED lighting at Water Treatment Plant:	\$ 200
○ Organic produce grown at Fire Dept	\$ 300
○ Compact fluorescents at Water Treatment	\$ 250
○ Paperless Board Meetings/Clerks Office	\$ 9,921
○ Change out downtown street lights	\$ 3,443
○ Police Eco-Boost/Fuel Savings	\$ 5,477

○ Total General Sustainability	\$ 19,591
○ PLUS	
○ Energy Performance Contract	\$116,086

○ Total 2012 Savings	\$135,677
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- These are Permanent Savings!

2012 Energy Savings: Energy Performance Contract

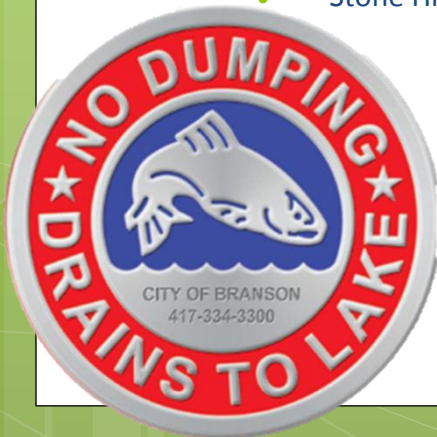
- **Actual Savings for 2012: \$116,086**
 - **20.4% above guaranteed savings**
- **Equivalent GHG emissions of 2,245,224 pounds**
 - **Equivalent to GHG emissions of 78 single family homes**
 - **Equivalent to planting 3,364 trees**

- Hybrid Fleet Car in 2012
 - 26 mpg vs 19 mpg for non-hybrid Escape
 - 27% fuel reduction costs
- Perform regular maintenance on vehicles to extend useful life
- Brought PACE program to the Board
 - Property Assessed Clean Energy
- Repurpose older buildings
 - (Old High School, Factory Merchants)
- Promote better community health
 - Trail creation
 - Employee wellness

- Design “Green Infrastructure/Rain Garden” parking lot
 - Under construction at Lakes Area Chamber of Commerce/Hwy 248
 - To be completed this spring
- Green Initiatives with the “Old High School” renovation project
 - Steel beams and bar joists recycled
 - Protection of the oak tree drip line
 - Increased insulation on the roof
- PAHs
 - The City of Branson does NOT use coal tar sealants on any city parking lots.
 - Coal tar sealants release PAHs (polycyclic aromatic hydrocarbons) into local lakes and streams.
- Walking as a form of Transportation (and Recreation)
 - 1 mile of walking trail added to the Roark Valley Trail
 - Now over 2.6 miles of connected trails



- **Replaced 47 Main Street street lights**
 - Energy efficient compact fluorescents
 - \$3,443 savings in annual energy costs
- **Branson Recycle Center Celebrates 20th Anniversary**
 - Over 400 citizens attended, toured
 - Promoted household chemical disposal/re-use
 - Collected 8,371 lbs. (4.2 tons) in 2012
 - Glass recycling
 - 5 tons/month in bins
 - Dicks 5 & 10
 - Big Cedar
 - Fall Creek Resort
 - Stone Hill Winery



- 200 metal decals applied to storm drains
 - Main Street and Branson Landing:
 - High foot traffic areas for impact
- Completed by volunteers (Eagle Scout project)
- "No Dumping...Drains to Lake"
 - 600 to be installed by 2014



A Decade of Buying Recycled

- **Sustainable purchasing/bid policy**
 - The City of Branson encourages sustainable procurement to ensure the products and services the City buys are as sustainable as possible having the lowest environmental and most positive social impact
- **Provide city print cartridge recycling**
 - 100 cartridges in 2012 (2X increase)
 - All departments
- **Use Brita water filter for employees**
 - Discourage purchase of bottled water
- **Mini-Urban Garden**



- ***Winner of the Green for Green Award for Paperless Agendas***

Working with the IT department to utilize the latest technology, **more than \$16,500 in savings have been realized over the last 4 years**. This project was made possible by the cooperation and support of Administration and the Board of Aldermen.



490,132 fewer copied pages (Eliminates shredding + disposal costs, too)

\$9,920.94 saved in production labor and paper purchases

No waste – public copies printed on demand or available on the web site

- ***Continuing our commitment to sustainability***



Digitizing Master Agendas, Ordinances, Resolutions, Contracts, Minutes and Bids for convenient access and retrieval of records requests.



- ***Sustainability and Efficiency***

An on-line system is used for court date notifications, entry of appearances, and communication with attorneys.

Saves paper cost and postage, staff time, filing space, court time and is faster.

Switching to electronic filing of traffic violation convictions

Consistently meet filing requirements, cut paper use, and reduce daily postage costs.

Payment of fines available on City web site, saving a trip to City Hall as well as saving staff time by reducing the processing of walk-in or mailed payments.

- ***Reuse, Reduce, Recycle***



- Combining contracts throughout City departments
 - Efficient, reduces repetition, reduces postage, paper and materials
- Reusing immigration and insurance documents for vendors as long as the documents are valid and continue to meet City requirements.
- Making Contract Management forms & contractual paperwork available as electronic scans – reduces paper usage.
- Creating & revising tracking and processing procedures to improve efficiency.

- Installed radio high efficiency compressor cooler in server cabinet
- **Prescription medicine drop off box.**
 - 354 pounds of expired /unused medication safely disposed
 - Deters flushing of meds-cannot be removed at WWTP
- Eliminated 2-part computer paper in dispatch
- **4 recycling bins installed**
- **No longer print:**
 - Lab reports (filed electronically)
 - Investigations (scanned into computer)
 - Reports to County Prosecutors (electronic) were previously driven to Forsyth.
- **Bike patrol and C.O.P**
 - **(Community Oriented Policing)**



- Communications went from MULES 3 to MULES 4 System
 - Dispatcher will have information sent electronically
 - Option to print PRN. Previously printed automatically under MULES 3 system

- For 2013: (In progress)
 - Communications Division in the PD
 1. Move the 911 system to transfer electronically/not printing
 2. Move all retention & warrant paperwork to electronic filing.
 3. Eliminate 911 printer and MULES printer
 4. Save hundred\$\$ in paper, ink cartridges and ribbons



Police Fuel Savings:

- (2) Police interceptor sedans with Eco-Boost, 6-cylinders
- Police interceptor utility, no eco-boost, 6 cylinders
 - Saving 1,825 gallons of gas annually over Crown Victorias
 - \$5,477.00 in fuel savings/yr
- Over the 80,000 mile service life of 3 vehicles
 - \$19,848.00 = Total Savings in Fuel over 80,000 mile service life
 - \$5,490.00 = Cost of Eco-Boost x 2
 - \$14,358.00 = Net savings of in fuel cost over 80,000 mile service life

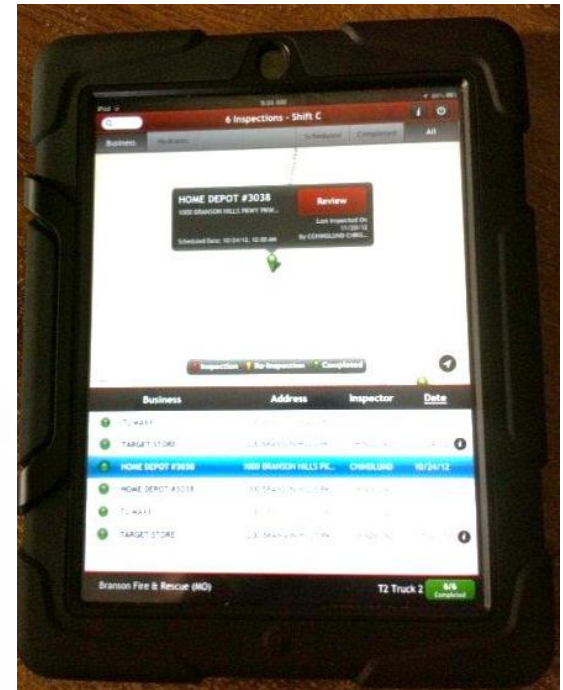
2012 Efforts...

- **Began Implementation of Community Plan 2030**
- **Worked w/ Gift of Green to plant trees**
(RV Park, RecPlex & Nygard Park)
- **Partner with First Baptist's Extreme Makeover to replant trees after tornado**
(Hiawatha Heights)
- **Arbor Day, ArborFest & Lakeside Forest**
(tree planting/care activities)
- **Green Initiative Awards**

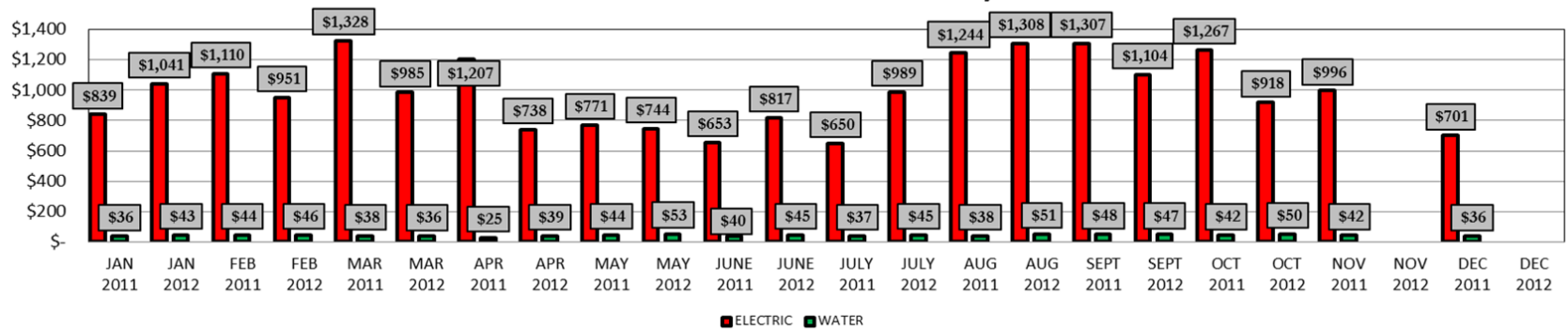


Focus on GREEN

- ❖ Purchased **FIREHOUSE Software** for electronic records management allowing the FD to go "paperless."
- ❖ Purchase of IPads to complete all new Commercial Property and Fire and Life Safety Inspections eliminating 2 part paper forms.
- ❖ Replaced certain interior and exterior lighting with energy efficient bulbs,
 - ❖ installing dimmable light switches in crew quarters.



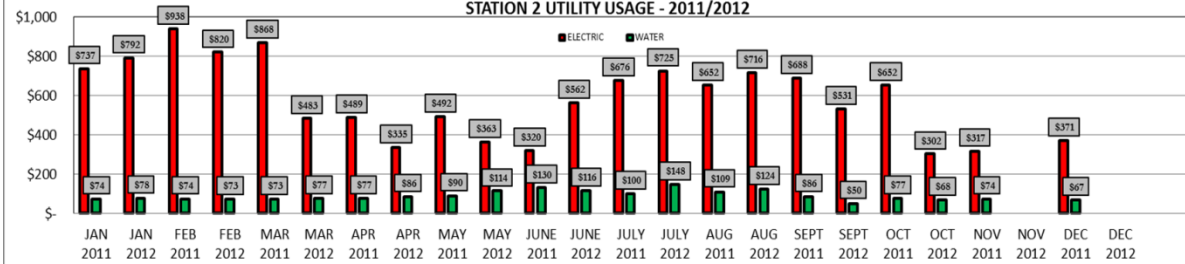
STATION 1 UTILITY USAGE - 2011/2012



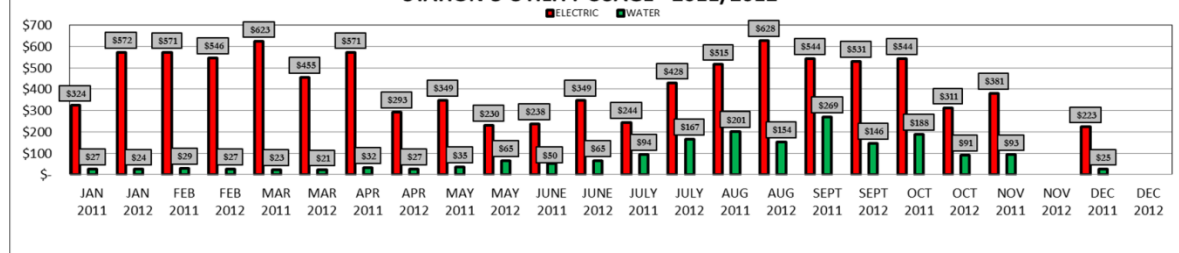
Utility Tracking

The FD is tracking utility usage and reporting monthly results to all personnel with a challenge/reminder to turn off appliances when not in use with noted \$\$\$\$ Savings!

STATION 2 UTILITY USAGE - 2011/2012



STATION 3 UTILITY USAGE - 2011/2012



Residential Size Water Heaters Insulated in 2012

- Organic / Urban Gardening
 - All three stations
 - Cost-savings to shift personnel for meals
 - Healthy, local produce = Healthy employees
 - Eco-friendly cleaning supplies
 - Carpooling to work

Recycling at
All Three Stations



**LED Lights replace
Compact Fluorescents**

save \$250 a year

Foyer Lighting at Meadows Water Treatment Plant

Sustainable Use of Recycled Asphalt: Road Grindings used for Backfill



- Five Towers
 - All switched to LED lighting
- Ceiling fluorescents changed
 - \$200 year/ energy savings
 - Energy efficient CFLs for meter reading



- Replaced 100 watt Fluorescent Bulbs
 - 8 watt LEDs
 - longer life and energy savings



Use of Recycled Asphalt

Compton Drive



Lift Station 4



- Renovation of the Campground Bathhouse
 - low flow showers and waterless urinals
 - reduces water usage.
- Over 25 truckloads of Cardboard Recycled
- Purchased Electric Golf Cart
 - reduce the use of Fossil Fuels
- Recycled over 35,000 Plastic Bottles
 - Up 10,000 bottles from 2011



- **Grew over 10,000 plants in the greenhouse**
 - **Flower beds in the Parks and at City Hall.**

Plastic Bottle Recycling Containers

- 10 plastic recycling containers
 - purchased to increase the recycling at the RecPlex as well as at Festivals/special events.
 - Use “green grant” to purchase
- increased the amount of recycling
 - also reduced the contamination of trash mixed in with the recycling.



Composite Wood Decking

Replaced wood decking on city dock with a new composite

- recycled plastic and sawdust
- Replaced by volunteers from Skaggs



- Initial investment cost more than wood
- new composite will never rot,
- saves valuable staff time in maintenance and replacement.
- **That's sustainability!**

Water Bottle Refilling Station

Adding 2 water bottle filling stations in early 2013.



- Less ends up in the waste stream
- Decreases likelihood of litter associated with your water consumption
- Reduces the carbon foot print of the city.



Server Virtualization

- Reduced reliance on physical servers
- Consolidated servers to ratio of 5:1
 - Reduced server power consumption 70%
 - Reduced server energy costs 60%
 - Reduces overall maintenance cost





Energy star qualified products help save money and reduce greenhouse gas emissions by meeting strict efficiency guidelines set by EPA and U.S. Department of Energy.

- All computers & monitors purchased in 2012 Energy Star compliant at “Gold Standard” level
- Power management policies used to save energy
 - All staff computers programmed to “stop spinning hard drives” after 30 minutes

“We work smarter: Copy and print less; store and send electronically more”

Reduce, Reuse and Recycle whatever we can...



- **CREATED VIRTUAL SUPPLY CABINET**
 - introduced by Human Resources in 2011 continues to be utilized by all departments. The VSC is an online storeroom of unused office supplies. The VSC is a share & exchange site for COB employees. Eliminates the unnecessary ordering of office supplies.
- All HR forms (with the exception of one) are now created and printed in-house.
 - Eliminated unneeded and costly duplicate/triplicate forms.
- In 2012 began scanning and e-mailing all employment applications to the applicable hiring department. The hiring department can then decide which applications to print. Eliminated the unnecessary copying/printing of applications and thus reduced waste.
- Familiarized ourselves with our department's document retention requirements,
 - make sure to have documents shredded when those requirements have been met rather than take up valuable storage space.
- Participated in self-assessment/Ozarks Green Score to see how we can increase our sustainability initiatives
- Active in monthly Sustainability Committee meetings, missing only one meeting in 2012.

Employee Sustainability Awards

o Green 4 Green Awards

- o Clerk's Office Team – **Reducing paper use by 95%**
- o PW Building Maintenance Utility Worker;
 - o Replacing 47 downtown street lights with energy efficient CFLs
 - o cost less than the old bulbs
 - o Saves the city \$3,443 in energy costs every year.
 - o New bulbs last 3 ½ years,
 - o reduces our labor involved in maintaining the lights.

o Two Green grants

- o 10 industrial recycle bins for RecPlex ball fields
- o 2 bottle refill stations for RecPlex

Comments & Questions?

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